

## **Base station, mobile unit and communication network**

### **Abstract**

5 A base station includes a transmission/reception device for communication with a mobile unit using one hopping sequence from a set of hopping sequences with a hopping sequence being a defined temporal sequence of transmission/reception frequencies and each hopping sequence differing from the other hopping sequences in the set. The base station also includes an identification device for the identification of the hopping sequence used for communication, so that the base station is always  
10 correlated with exactly one hopping sequence. A mobile unit allocated to that base station generates the hopping sequence used by the base station itself. Therefore by modification of the physical layer, but without modification to the higher protocol layers of DECT, an adaptation of applications designed for the DECT standard to the communication technology stipulated for the ISM bands can be achieved.